

## WORLD CONGRESS ON RHEUMATIC HEART DISEASE

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**Title:** CLINICAL PROFILE, TREATMENT AND FOLLOW-UP OF PATIENTS WITH RHEUMATIC MITRAL STENOSIS IN A TERTIARY CENTER IN TANZANIA

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**Background & Aims**: Rheumatic heart disease remains the most common cardiovascular disease in children and young adults. This study provides contemporary data on the clinical profile, treatment and follow-up of patients with rheumatic mitral stenosis (MS) in Tanzania.

**Methods:** Patients' medical information, investigations and treatment data were recorded in this prospective cohort study. They were followed up for 6 to 24 months. Kaplan-Meier curves and Cox proportional hazards model were used in analyses. P-value < 0.05 was considered statistically significant.

**Results**: We enrolled 290 patients. Median age was 36 years, females (68.3%), and low income (55.5%). Pure MS was found in 27 (9.3%) patients, atrial fibrillation (31.4%), stroke/transient ischemic attack (18.9%), and heart failure class III-IV (44.1%). Median duration of disease was 3 years, secondary prophylaxis (27.7%), and oral anticoagulants use (62.3%). Interventions were done in half of the patients. Median follow-up was 23.5 months. Mortality was higher in the medical than surgical treatment (10.4% vs 4%, logrank p = 0.004). In multivariable analysis, the risk of death among patients on medical was 3.12 times higher than those on surgical treatment (crude HR 3.12, 95% CI 1.50 - 6.49, p = 0.002) and 2.44 times higher among patients with arrhythmias vs without arrhythmias (crude HR 2.44, 95% CI 1.19 - 4.49, p = 0.015).

**Conclusions:** In Tanzania, rheumatic MS affects young people, females and with low income. There is late hospital presentation, low secondary prophylaxis utilization and sub-optimal oral anticoagulants use. A half of patients were on medical treatment with two-fifth waiting for interventions. Surgery is carrying low mortality compared to medical treatment and arrhythmias is associated with high mortality. We recommend optimization of interventional services, secondary prophylaxis utilization, oral anticoagulants use, and managing arrhythmias.